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fact that the spot of June 24 was north makes it still more probable that it belongs to the next cycle.

The polarity of this spot was negative which is contrary to the polarity of the great majority of single northern spots of the declining cycle. The day was partly cloudy so that no calcium spectroheliograms could be made and the location of the spot with reference to the surrounding flocculi is therefore uncertain. The percentage of *af* spots is small, however, and if we assume that the spot was *a* or *ap* it indicates that the polarities will again reverse as at the last minimum. About three per cent of the total number of spot-groups are irregular in polarity, and this proportion is greater among the small spots so that there is a possibility that this spot is one of these exceptions. Until a few bipolar groups of the new cycle appear the question of the reversal of polarity can not be settled.

PROPER MOTION AND HYPOTHETICAL PARALLAX OF NOVA T CORONÆ 1866

This nova was known before its outburst as B D +26°2765. It has not been possible to find any accurate position for the star in catalogues earlier than 1866. Since this date its position has been determined by several observers and it has been thought that the existing material might give an indication of the proper motion of the star. The table gives the positions known to me, reduced to the equinox of 1900. In a few cases systematic corrections to the Boss system have been applied.

Authority	R. A. 1900	Dec., 1900	Epoch	Wt.	Residuals	
Quet. 6384	$15^h54^m18^s.99$	$+26°12'13''.2$	1866.7	1	$-0^s.14$	$+0''.2$
Bonn. VI	19 .01	13 .3	66.4	1	—0 .12	+0 .3
Paris, 2, 19959 . . .	19 .06	12 .8	66.4	2	—0 .07	—0 .2
Göttingen, Behrm.	19 .26	12 .7	66.4	1	+0 .12	—0 .3
Berlin, Romb . . .	19 .24	12 .2	66.4	2	+0 .10	—0 .8
Cambridge, Graham	19 .22	15 .0	66.4	1	+0 .09	+2 .0
A G Cambr. 7433	19 .18	13 .2	76.4	1	+0 .04	0 .0
Radcliffe, 1900 . .	18 .93	13 .7	1898.8	2	—0 .21	+0 .4
Carte du Ciel, Oxford	19 .23	13 .5	1901.5	2	+0 .09	+0 .1
Barnard	19 .19	12 .6	1906.6	3	—0 .04	—0 .8
Greenw., 1910 . . .	15 54 19 .18	13 .9	1912.2	3	+0 .03	+0 .3

The least squares solution yielded: $\mu\alpha = +0''.008 \mp 0''.017$;

MAGNETIC CLASSIFICATION OF SUN-SPOTS FOR MAY, 1922

No.	C. M. P.	Lat.	H	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1966 1967	Apr. 29.7 May 3.0	+ 6 + 9	17 30	β βf	βf	β	βp	βp	x	βp								
				2	1	1	1	1	1	1	—	—	—	0	0	0	0	0

No.	C. M. P.	Lat.	H	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1968	May 29.6	+ 9	13									x	αp	αp	αp	αp	αp	x	βp
				0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1

NOTES

No. 1967. On May 7 the following spot had disappeared, but an invisible spot with negative polarity was detected in approximately the same position.

No. 1968. A return of No. 1967.

MAGNETIC CLASSIFICATION OF SUN-SPOTS FOR JUNE, 1922

No.	C. M. P.	Lat.	H	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1968	May 29.6	+ 9	13	*af*														
1969	June 9.9	+ 8	8							*βp*	*ap*							
1970	11.6	+ 4	4									*af*	*x*	*β*	*af*			
1971	16.8	+ 8	6											*x*	*x*	*β*	*x*	
1972	9.8	+ 9	7											*ap*	*β*	*βf*	*ap*	*x*
1973	12.5	—10	7															*β*
				1	0	0	0	0	0	1	1	1	1	3	3	2	2	2

No.	C. M. P.	Lat.	H	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1973	June 12.5	—10	7	*β*	*β*													
1974	20.4	— 8	3						*x*	*ap*								
1975	22.7	—15	3							*ap*								
1976	24.8	+31	3									*a*						
1977	20.2	— 8	*x*										*x*					
				1	1	0	0	0	1	2	0	1	1	0	0	0	0	0

NOTES

No. 1969. On June 8 the following negative spot had disappeared and an invisible spot with negative polarity was detected in its place.

No. 1976. A very small negative spot in high northern latitude.

$\mu\delta = +0''.009 \mp 0''.007$ (p. e.) from which $\mu = 0''.012$, $\tau = -0''.008$, $v = -0''.009$.

The accuracy in the positions is rather good taking into account the faintness of the star in meridian circle instruments. An inspection of the observations makes it probable that the derived proper motion in declination is real. Admitting only that the order of magnitude of the motion is correct we see that the star is probably not a close object. If we use the mean absolute magnitude as derived from an investigation of the motions of novæ we get a hypothetical parallax of 0″.0010 in good agreement with that to be expected from the size of the proper motion derived above.

Another and better means for getting the parallax is afforded by observations of the spectrum. Spectrograms obtained by me at the Lick Observatory during the summer of 1921 showed such a resemblance between the absorption spectrum of the star and that of a giant Ma that it seems beyond doubt that the nova is now a giant star. This conclusion is also given in the Mount Wilson report for 1921 as a result of Adams' and Joy's investigations. If then we assume the absolute magnitude to correspond to the mean value for M giants, we get, as the apparent visual magnitude is now 9.6, the parallax 0″·0014.

As the nova *originally* had an apparent magnitude about the same as its present magnitude and as its proper motion is 0″.012 we find from van Rhijn's table in Aph. J. **43,** 36, that the mean parallax for such a star is 0″.0025.

$\pi = 0''.0014$ (from the behavior of the absorption lines).
0 .0010 (from the absolute magnitude as derived from proper motions of novæ).
0 .0025 (from the mean parallax formulæ).

As a mean we will adopt $\pi = 0''.0013$ from which follows M min$=+0.2$ and M max$=-7.4$ the last value in good agreement with what has been derived as the mean absolute maximum magnitude for novæ.

No trigonometric or spectroscopic parallax has been published for this star. It is desirable that parallax observers include this interesting object in their programs.

Knut Lundmark.

ON THE SECULAR CHANGE IN THE PROPER MOTION OF BARNARD'S STAR

Addendum to the note in these Publications for April, 1922

Professor Fritz Cohn of the Astronomisches Recheninstitut Berlin-Dahlem kindly called our attention to the fact that the formula derived by Schlesinger (Astron. Journal, **30,** 137, 1917) had previously been investigated by Seeliger (Astr. Nachr. **154,** 67, 1901) and Ristenpart (Vierteljahrsschrift **37,** 242, 1902).

KNUT LUNDMARK,
WILLEM J. LUYTEN.

PERSONAL NOTES

Dr. George E. Hale, Director of the Mt. Wilson Observatory, has been elected the twelfth representative of the international committee which, under the auspices of the League of Nations, is to study and suggest methods of intellectual co-operation throughout the world. He is the first American to be chosen for the committee.

In addition to the regular staff the following persons will be engaged in astronomical or physical investigations at the Mt. Wilson Observatory during the summer months: Prof. A. A. Michelson, Research Associate; Prof. C. G. Abbott and Mr. L. B. Aldrich of the Smithsonian Astrophysical Observatory; Dr. J. C. Duncan, Director of the Whitin Observatory, Wellesley College; Dr. Knut Lundmark, Instructor in Astronomy in the University of Upsala, Sweden. Miss Helen Davis, a former computer, and Mr. T. S. Jacobson, a senior student in Stanford University, are temporary members of the computing staff of the Mt. Wilson Observatory.

It is with deep regret that we record the death of Prof. J. C. Kapteyn, at the age of 71. After the obligatory retirement at his 70th year as professor of astronomy at the University of Groningen, Kapteyn filled the position of adjunct-director of the Leiden Observatory, where he planned to reorganize the meridian-circle department. Astronomy has thus lost one of its foremost pioneers. Among many honors received by Kapteyn was the award of the Bruce Medal of the Astronomical Society of the Pacific in 1912.

Dr. W. W. Coblentz, Associate Physicist of the National Bureau of Standards, Washington, D. C., spent part of the month of June at the Lowell Observatory extending his radiometric investigations of last year at Flagstaff, on the stars and the planets. The observing conditions were favorable and gratifying progress was made both in the accumulation of valuable new observational data and in tests of new apparatus. The observations were carried out with the 40-inch reflector.

THE INTERNATIONAL ASTRONOMICAL UNION

The list of officers as given on page 173 of the June number of these Publications is incomplete. The following name should be added:

Deslandres of France, Vice-President.